

”...WITH A PASSION FOR COFFEE”

Service manual

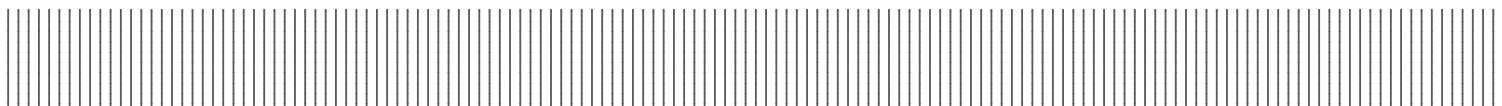


CQ Future BTC

Your retail dealer

S_GB

Rev. 071016



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We congratulate to your choice of a CQ Future BTC automat.

Please read this manual before you take the machine into operation for the first time.
The manual contains important instructions for a safe and proper use of the machine.

Always keep this manual within reach for the user!

CQ Future BTC freshbrew automat

- Making freshly coffee cup by cup
- With an internal grinder for grinding of coffee beans
- Jug facility with key switch
- 8 choices of drinks,
- 3 ingredients canisters + bean container,
- Brewing mechanism with coffee filter
- Electronically temperature controlled
- Adjustable coffee strength
- Illuminated cup while brewing
- Clock functions

Fakta:

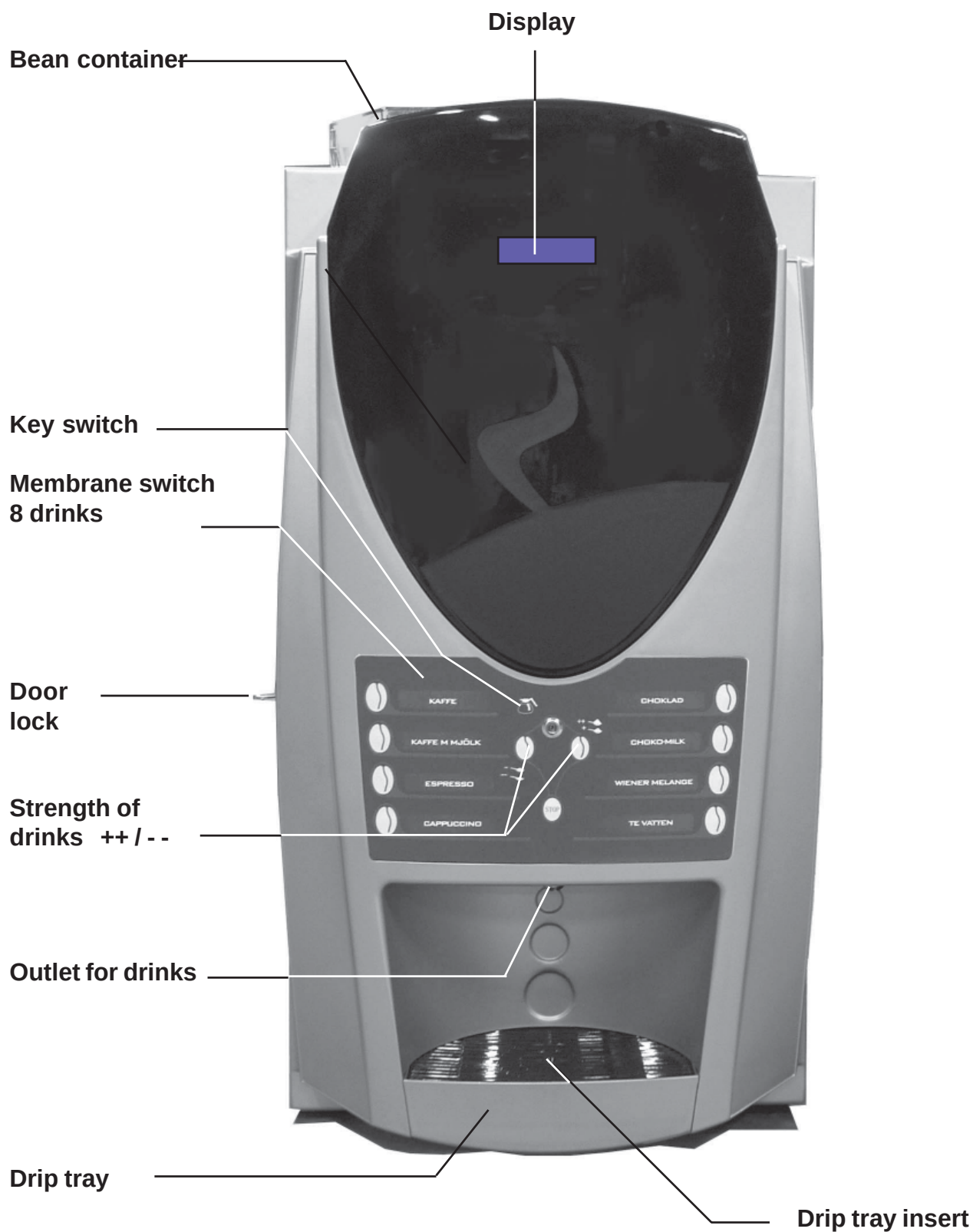
Future BTC

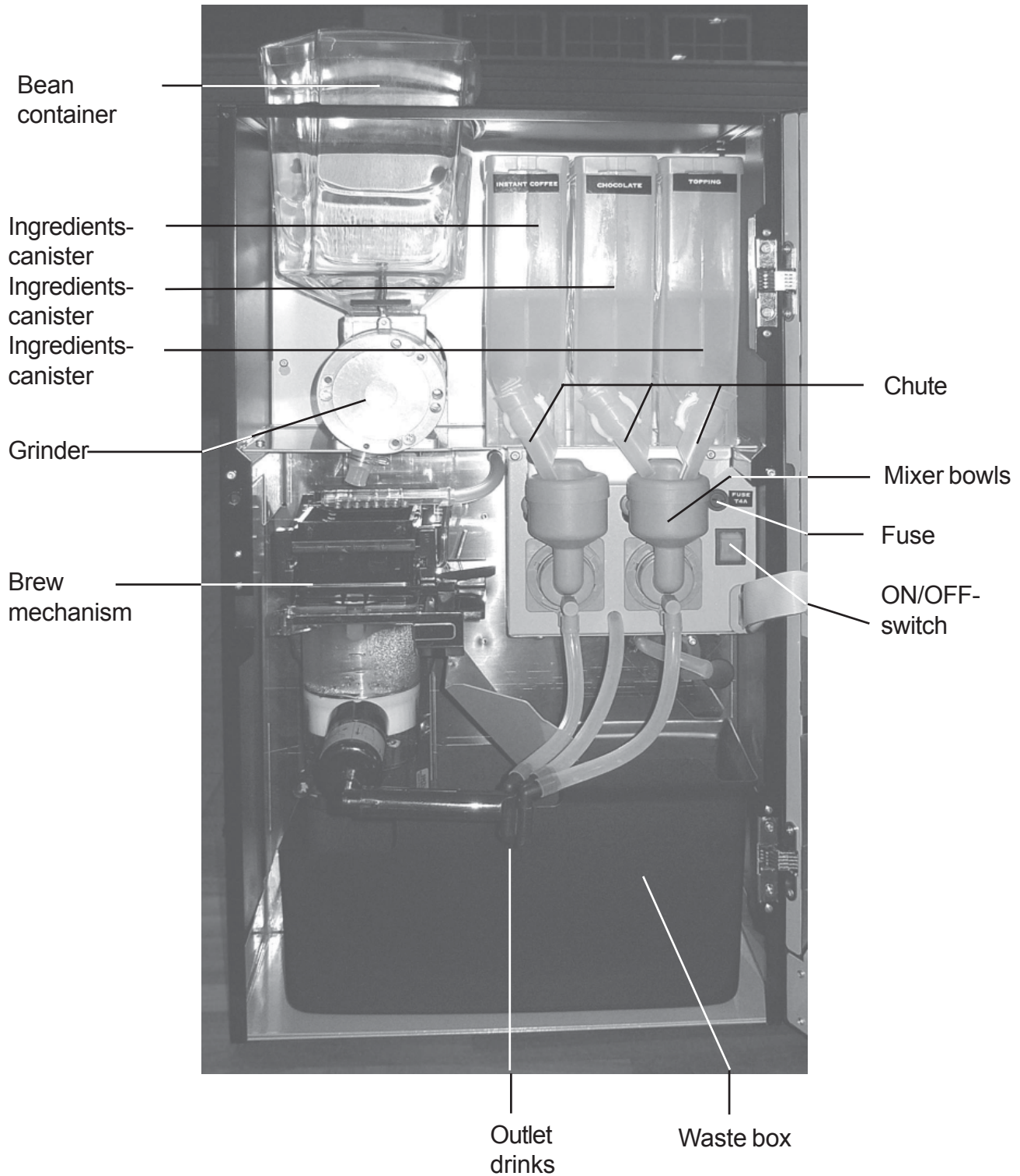
Height	860 mm (780mm)	base cabinet 800mm
Width	420 mm	base cabinet 420mm
Depth	560 mm	base cabinet 460mm
Weight	37kg (emballage cá 4kg)	
Tankage	2.4 liter	
Electricity	230V/2200W	
Water connection	½"outside thread (enclosed)	
Ingredients canisters	1. instant	
	1. chocolate	
	1. topping	
Ingredients canisters	1. coffee beans	



Membranswitch







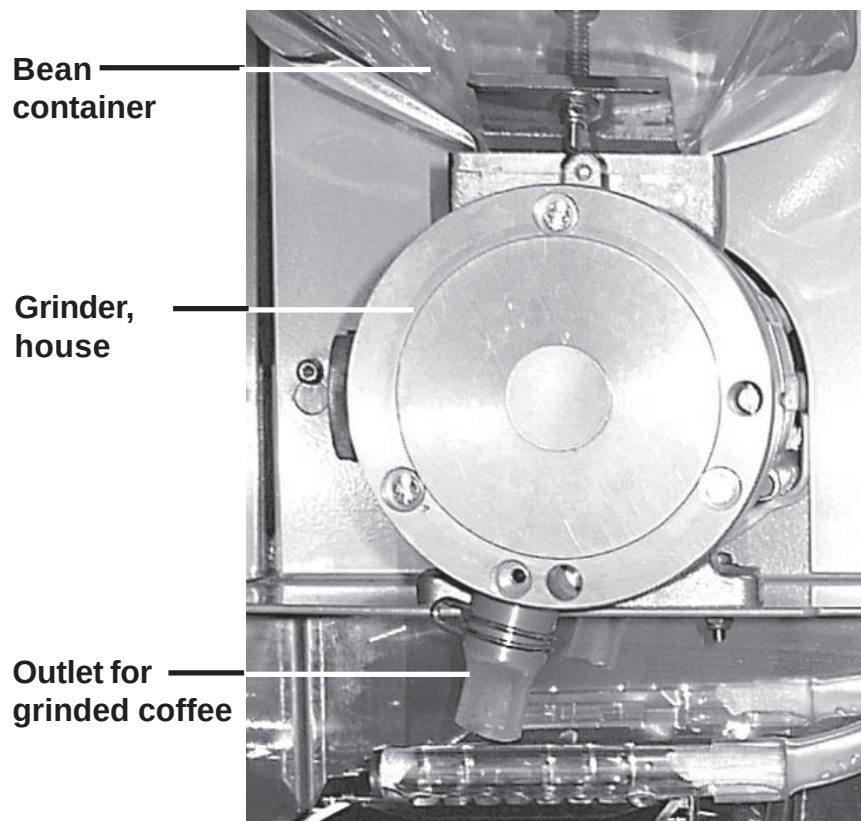
Detail;	Ingredients;	Width;	Height;		Volume/litre	Amount/unit
Canister;	coffee beans	160	250		7,3	1
Canister;	instant	67	250		2,55	1
Canister;	chocolate	67	250		2,55	1
Canister;	topping	67	250		2,55	1

Adjustments:

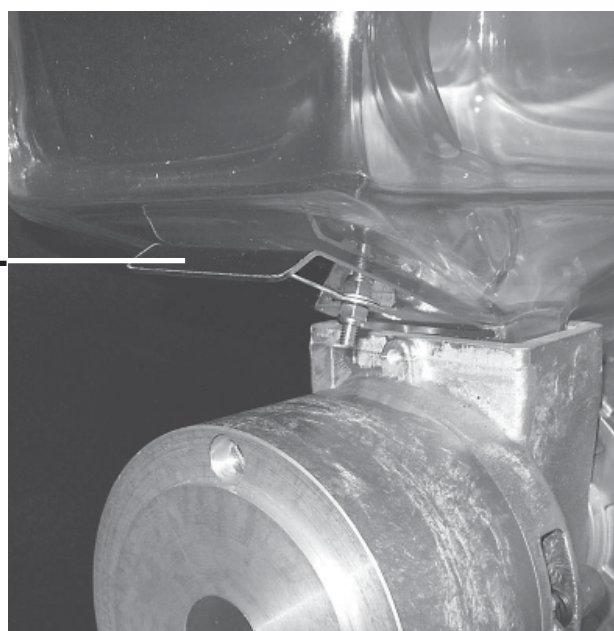
The adjustment of the blades is set at the factory.

All maintenance, adjustments and installations shall be done of an Coffee Queen authorized service technician. This coffee grinder is only constructed to grind coffee beans without additives (as tasted oils or sugar).

Any kind of use apart from that is improper and therefore unauthorized, the producer refuses all responsibility for damages arising from improper use of the coffee grinder described in this instruction.



Closing
hatch



1. Place the brewer on a flat level and waterproof surface.



Connect the electrical plug to a separate grounded wall socket **230V 10A**



OBSERVE!

Make sure there is a space behind the machine for free flow of air. (minimum 10cm).

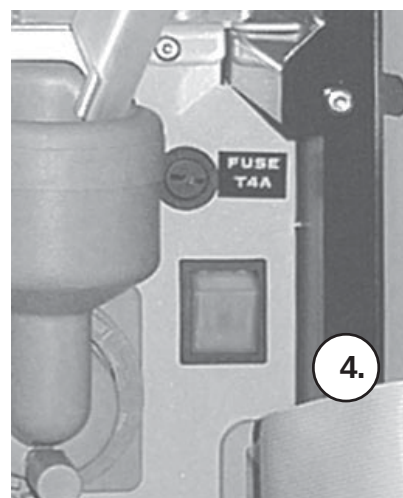
2. Connect attached water tube to cold water with an R 1/2".
Make sure that the water hose not are kinked anywhere when machine is pushed into place.
Please flush water tube before connecting it to machine, this to avoid any particles to damage the inlet valve.

3. Open the water inlet.
4. Turn on the ON-OFF switch inside the door.

Water is been filled into the tank automatically with 2,4 litres of water. The heating will not start before the water level reaches the level sensor.

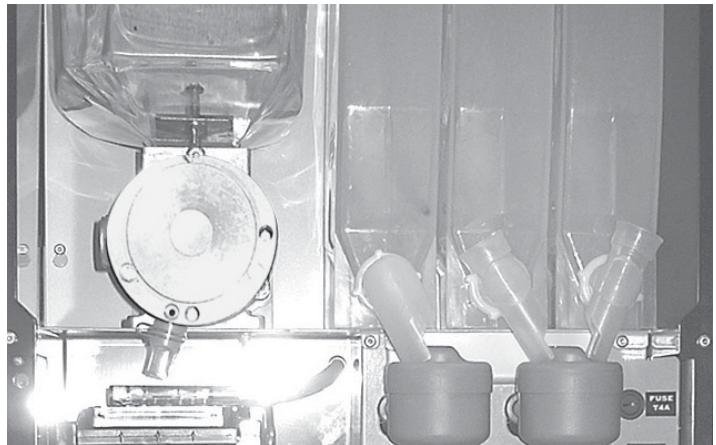
Set temperature is approx 97°C.

5. Close door.

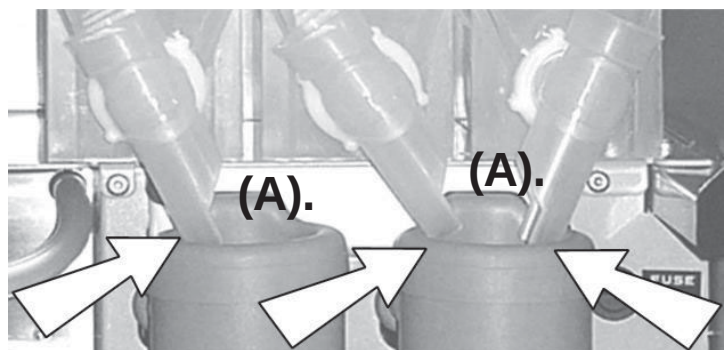


6. Fill canisters with ingredients.

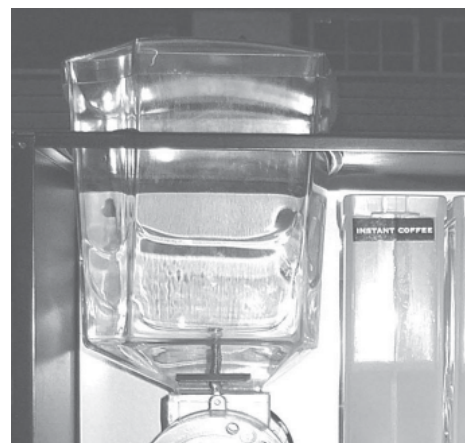
Take out (this to avoid unnecessary spillage in the machine) ingredient canisters and fill them with ingredients.

**7. When placing the ingredient canisters;**

Make sure that the outlet pipes on the ingredient canisters are touching the steam traps (A).

**8. Fill bean container with coffee beans.**

1. Remove lid on bean container and fill bean container with coffee beans without additives (as tasted oils or sugar).
2. Open closing hatch on bean container.



When water in tank have the right temperature

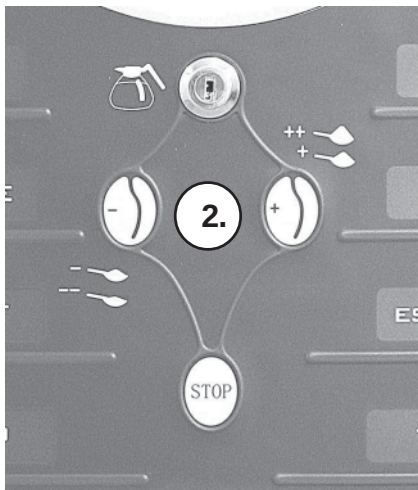
the message **"please wait"** will disappear and the machine is **ready to use**.

"please wait"

Brewing of coffee in cup, etc.



- ① Place a cup in the centre of the cup holder.



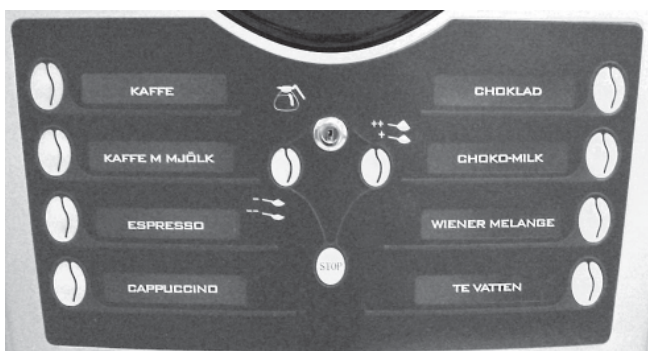
- ② The strength has a standard setting, if you wish to increase or decrease it, do as follows if not continue to point 3.

Stronger drink;

Increase by pushing + or ++ for 5% or 10% alternative

Weaker drink;

Decrease by pushing - or -- for 5% or 10% (the indication lamp will go up or down depending of choice).



3. Choose drink by pushing on the button to the right of each menu.
The display will show; "Please wait", and the cup will be illuminated.

Wait until the light on cup and message **"Please wait"** has been turned off before you take your cup.

Enjoy your drink.

Brewing of jug.

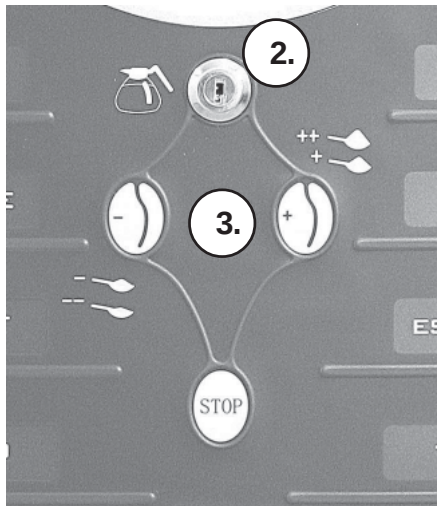
- ① Place a jug in the centre of drip tray. (For jug 1,8L loosen drip tray).



Serving pot 1, 8L:
art.no. 110001



Serving pot 1,2L: art.no. 1103091



- ② Turn on the key with jug symbole clockwise.
- ③ 6 cups of brewing is standard settings,
Change amount of cups by pushing + or - button.
Optional up to 12 cups or down to 1 cup brewing.
- 4.



- ④ Push the button for drink 1.
5. Wait until the light and message "Please wait" has been turned off before you take out the jug.
6. Serve a jug with good coffee.

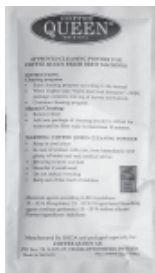
Automatic cleaning of brew mechanism,

Shall be done every week.

The brew mechanism can easily be cleaned with the key switch in "cup" (normal) position.



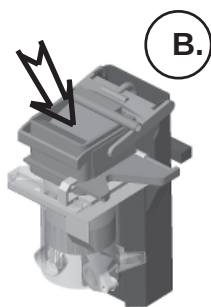
A.



1. Turn the key slowly ninety degrees and back again.
2. **Push button for drink 1 for 6 seconds.**
After 4 seconds the signal will go faster.
3. After 6 seconds **The display shows;** "Open door"
"load detergent".
4. Fill 25gr detergent (one portion bag, see fig. A) into the brew mechanism. fig. B.(Detergent will be supplied from your dealer)

The display shows; "Close door"

The display shows; " When ready press key"



5. Place a jug into the drip tray and **Push button for drink 1**

The display shows; "Cleaning mixer" (2....)

The display shows: "Rinsing coffee" "Soak time:"

The machine start to count down from 300 seconds.

The display shows. "Brewer cycle" the machine is counting down.

To stop cleaning process: push "Stop" button.

The brew mechanism will go back to start position. NOTE! Dont stop the process when detergent has been loaded the cleaning process must be finished.

IMPORTANT! Cleaning of brew house.

After the automatic cleaning program is finished. Clean brew house! This must be done, to make sure that you will remove residual detergents and coffee remains!

Dismantling and cleaning/washing brew house:**6. Push "+" button for 6 seconds**

The display shows: "Change paper/Rotate" "Push E/ +"

7. Push button for drink 2.

The display shows; "Preparing paperload".

The machine will rotate in position.

The display shows, "Change paper"

8. Open door, dismantle, clean and reassemble brew house.**9. Close door.**

Machine is ready to use again.

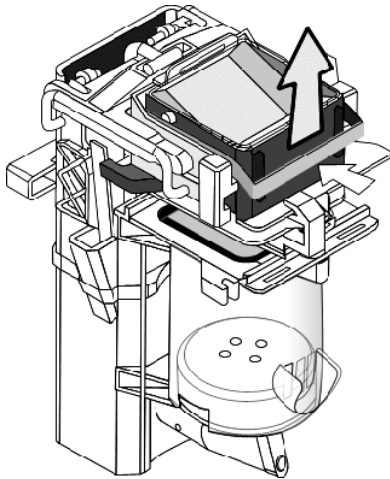
10. Take out a cup of coffee and pour it out to make sure that there is nothing left of detergent.**NOTE!**

If machine not will go back in start position.

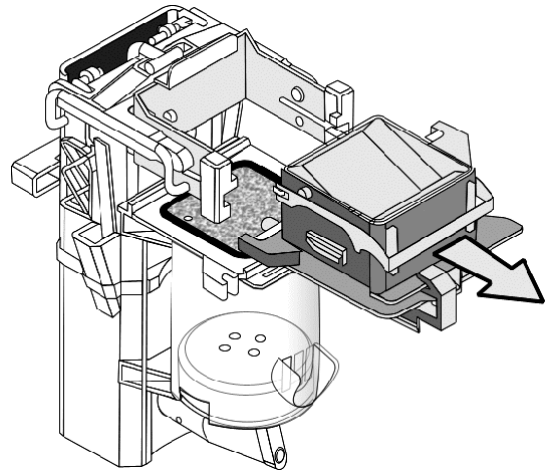
Restart machine.

Dismantling and cleaning brew house:**Dismantle brew house:**

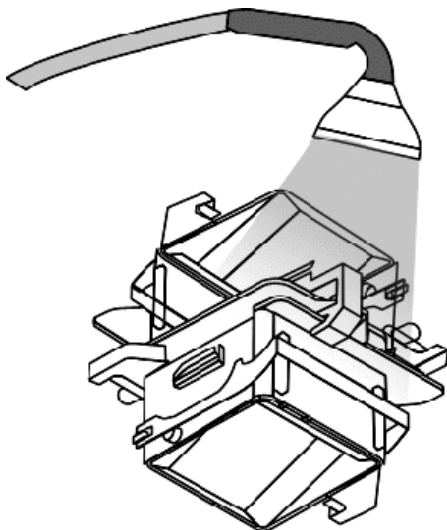
1.



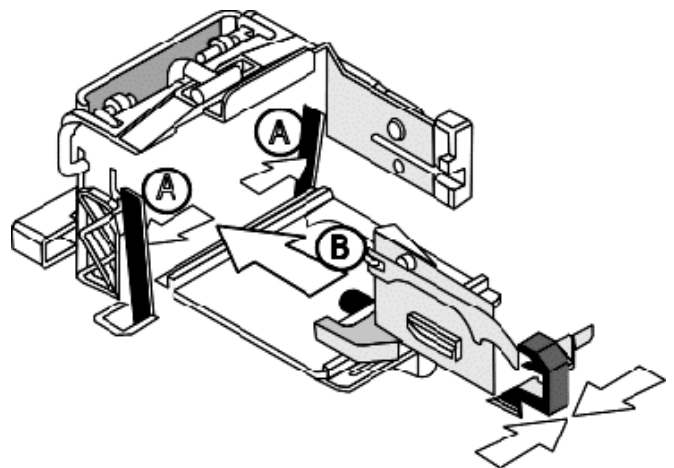
2.

**3. Flush brew house!**

To remove detergent and coffee remnants.



4.

**Reassemble brew house.**

NOTE! When reassemble brew house make sure that (B) wiper are between (A) arms.

Important! wash carefully

To remove cleaning
and coffee remains

Weekly cleaning! Automatic cleaning of mixing bowls.

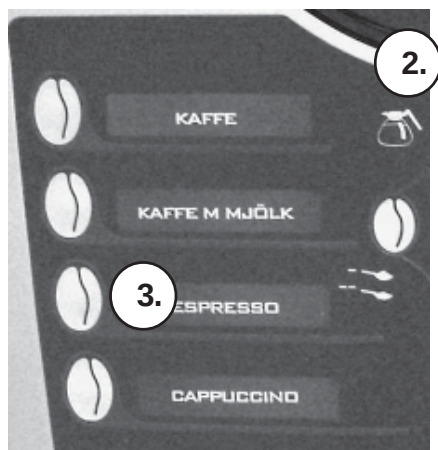
If you only wish to clean the mixer bowl and whipper house; Follow these



The mixer bowls can easily be cleaned with the key switch in "cup" (normal) position.

Automatic cleaning of mixer bowl.

1. Place a jug in the drip tray.
(loosen drip tray).



2. Turn the key slowly ninety degrees and back again.

3. Push button for drink 3 for 6 seconds.

After 4 seconds the signal will go faster.

After 6 seconds the mixer bowl and the whipper house no starts to be cleaned for 10 seconds.

The display shows: "Cleaning".

By cleaning means that water is flushed and whipper motor rotates.

Automatic cleaning of In/Outlet valves:

The In/Outlet valves can easily be cleaned with the key switch in "cup" (normal) position.



- ① **Place a jug in the drip tray.**
(loosen drip tray).



- ② Turn the key slowly ninety degrees and back again.
- ③ **Push button for drink 1 and 2 at the same time for 6 seconds.**
Keep buttons down.
- ④ All In/Outlet valves will now start to open and close with 2 pulses/second in 10 seconds or as long as you hold the buttons.



The display shows: "Cleaning valves".

- ⑤ **Push button for drink 2 for making a brew cycle and flush remaining water and scale from the cleaning.**

Rotate brew mechanism without water or ingredients:

The brew mechanism can be rotated without water and ingredients with the key switch in "cup" (normal) position. To be used when brew mechanism has been dismantled for washing and shall be remounted.



1. **Push "+" button for 6 seconds**
After 4 seconds the signal will go faster.

The display shows: "Change paper/Rotate"
"Push E/ +"

2. **Push + button.**

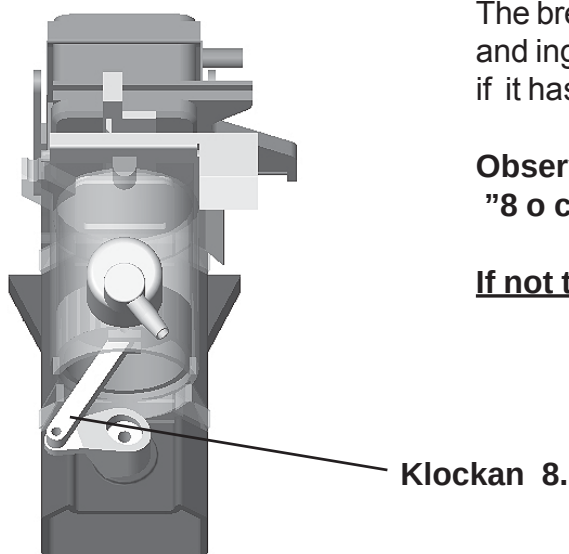
The display shows: "Rotate cycle without water".

3. **Push button for drink 2.**
The display shows: "Rotate"

The brew mechanism rotate one turn without water and ingredients and the mechanism falls into position if it has been dismantled.

Observe! The push rod shall be in position "8 o'clock"

If not take out again and repeat the procedure.



Klockan 8.

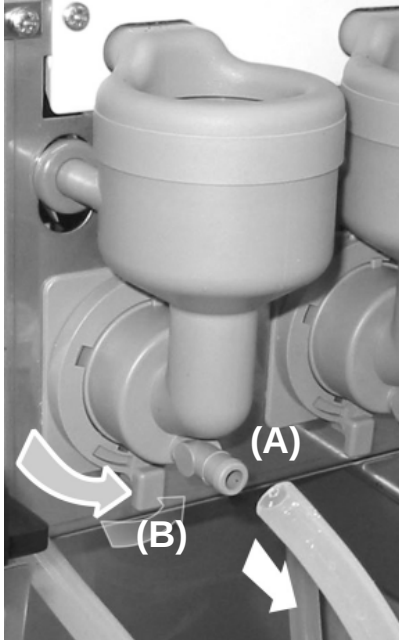
7. CLEANING:

Weekly cleaning

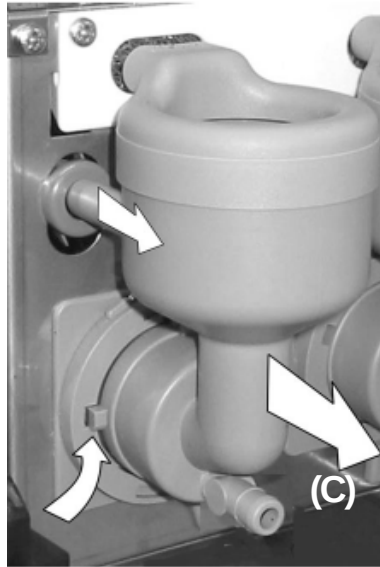
Future

Dismantle : Mixer system

1. Loosen outlet hose (A) and turn lock knob (B) anti-clockwise.



2. Loosen mixer bowl. Pull apart (C).



3. Loosen whipper (D) pull whipper straight out from the machine.

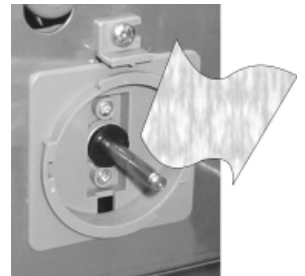


4. Turn lock knob anti-clockwise.(E) until it stops



Cleaning

5. Clean with a wet rag and drought drily.



Wash these parts:

.6.

- A. Mixer bowl



- B. Steam trap



- C. Whipper



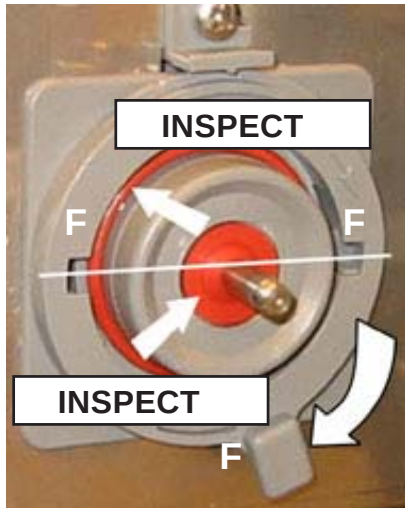
- D. Assembly plate



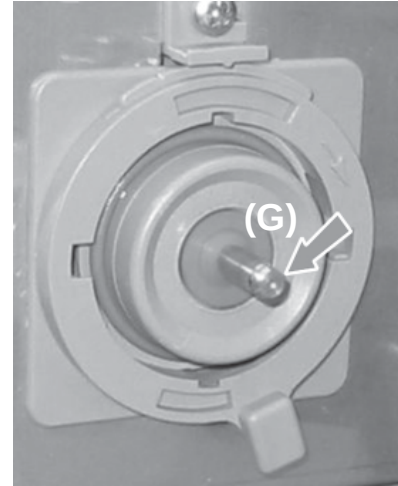
Make sure this parts are dry before use

REASSEMBLE: Mixer system

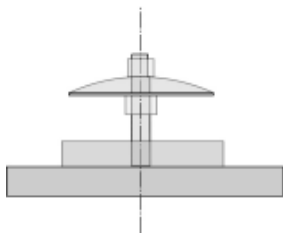
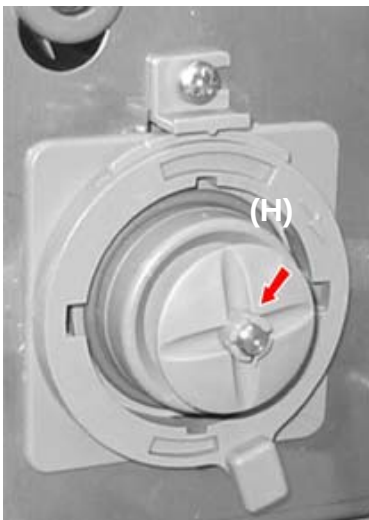
7. Reassemble the assembly plate by turning lock knob **(F)** clockwise. **INSPECT** gaskets.



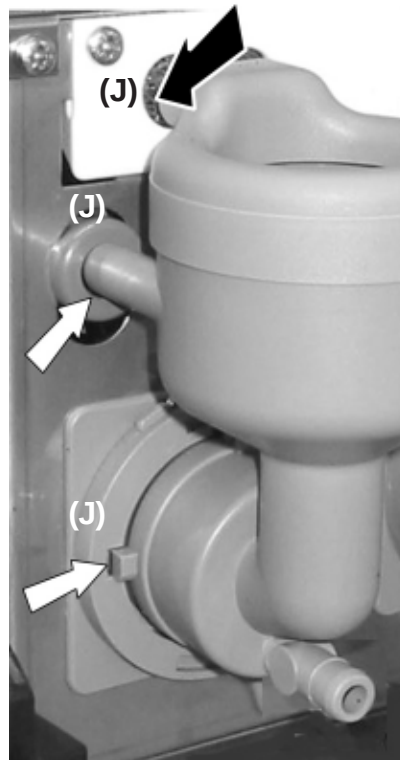
8. Make sure that the motor whippers plane side will be in accordance with the whippers plane side. see next **(G)** and picture **(H)**.



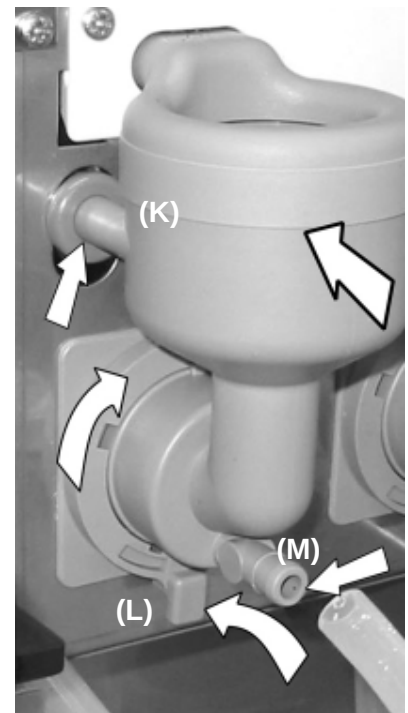
9. Assemble whipper , pull until you hear a clicking noise. **(H)**.



10. Assemble mixer bowl and steam trap **(J)** see picture.

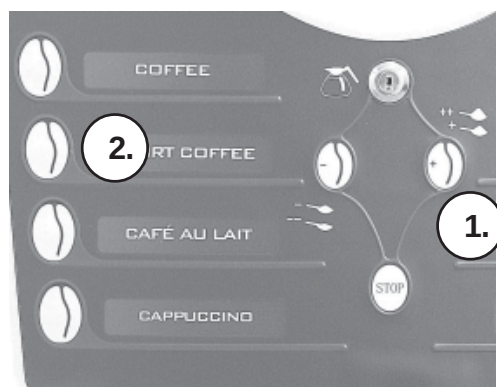


11. Easily push the mixer bowl towards, according to **(K)** and lock with lock knob **(L)**. Connect outlet hose **(M)**. **(NOTE!** make sure that all water hose are connected at right place



Dismantling and cleaning coffee filter.

A tool dismantling the coffee filter, comes with machine.



1. Push **" + button "** for 6 seconds.
After 6 seconds the display shows;
"Change paper/ Rotate" "Push E/+".

2. **Push button for drink 2.**

The display shows; "Preparing paperload".

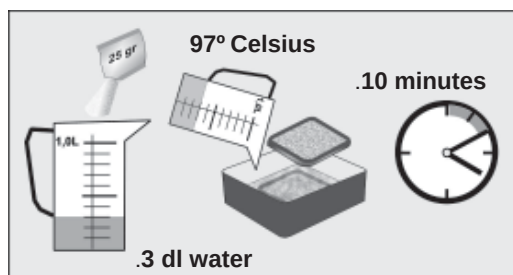
The machine will rotate in position.

When the display shows, "Change paper" open the door and insert the dismantling tool (A) through the brewer spout all the way to the back of the cylinder, then slide it up until contact is made with the screen assembly.
Fig. 1.

Push up on the rear of the screen assembly until it pops out of the cylinder. Fig. 2.

3. Soak the screen assembly in a solution of 25gr. cleaning agent in 3dl water for a maximum of 10 minutes. Fig. 3.

Fig. 3.



(Cleaning agent is supplied by your retail dealer)

- 3

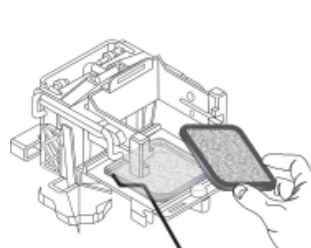
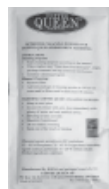


Fig. 2.

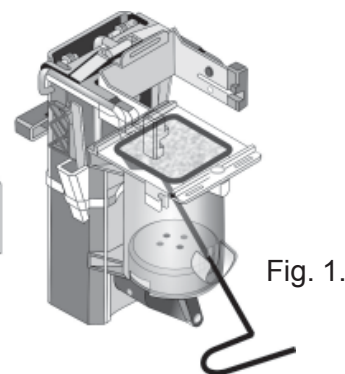


Fig. 1.

(A)

4. Remount the screen assembly and close the door. Then the machine will return to start position and the machine is ready for use.
If machine not will go back in start position. Restart machine!
5. Make a cup of coffee and throw it out.
To make sure that there is nothing left of detergent.

Prolonged contact with cleaning agent may damage the screen assembly. Once this is done, the screen should then be thoroughly rinsed with dish soap and warm water to remove any leftover residue.

Cleaning agent: (brew mechanism)
Filter: (brew mechanism)
Tool: (dismantling filter)

Coffee Queen article no 1104161
Coffee Queen article no 47200213
Coffee Queen article no 4720090

Cleaning when needed.

Cleaning bean container.

1. Shut closing hatch.
2. Dismantle bean container.

Use a soft rag and liquid cleaning agent to prevent scratches.

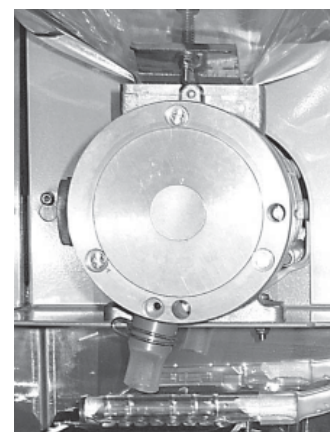
Note! Make sure that all parts are dry before use.

Outside cleaning; use a soft rag and liquid cleaning agent to prevent scratches.



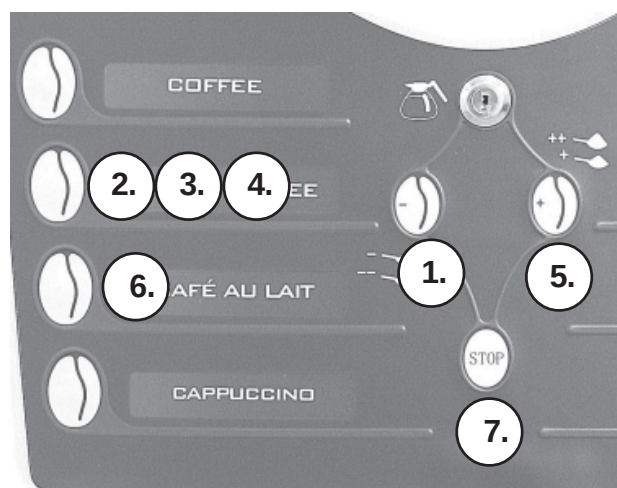
Cleaning of grinder.

Should be done every sixth month, of an authorized service technician.



Cup counter:

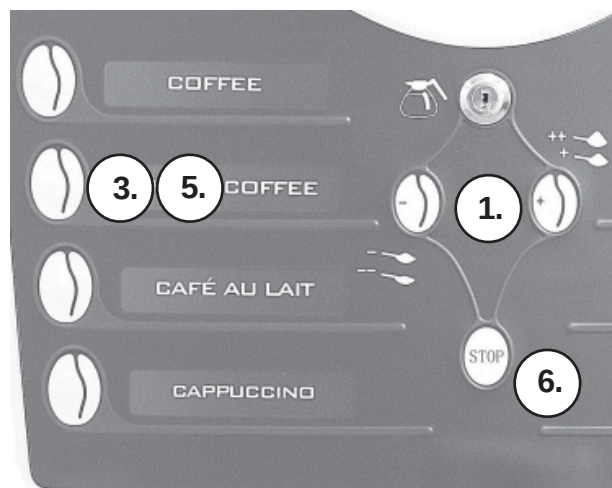
The machine has a cup counter which is available to see and reset with the key switch in "cup" (normal) position.



1. Push "-" button for 6 seconds.
After 4 seconds the signal will go faster..
The display shows: **"Total xxx cups"**
2. Push button for drink 2.
The display shows:
"Choice 1 free xxx cups"
3. Push button for drink 2.
The display shows
"Choice 1 coin xxx cups"
4. Push button for drink 2.
The display shows
"Choice 1 xxx cups in can"
5. Push "+" button to reach to "choice 2" etc.
6. Push choice 3 to reset the counter.
7. Push "Stop" button to go back to user mode.

Easy Access:

Volume and strength can be adjusted with $\pm 15\%$ with the key switch in "cup" (normal) position.



1. Push "+" and "-" button at the same time.
After 4 seconds the signal will go faster.
The display shows:
"Easy access" "strength 1 100%"
2. Choose the drink you want to change by pushing "+" or "-" button.
3. Push button for drink 2.
The display shows: for example.
Volume 4 and "Blinking 100%"
Change by pushing "+" or "-" button.
4. Push button for drink 2 to confirm the change.
Press "stop" to go back to user mode.

10. Safety functions.

Future

The machine is equipped with following safety functions

1. Indication of door
Door not closed
The display shows; "Door open"
2. When machine is not in use:
Valves are blocked.

"Door open"

11. Failure messages.

Failure messages which can mostly be corrected without any help from service company

1. The display shows; " Blocked" "Water level low"
Please check incoming water connection
Turn off the machine with the main switch
wait for 10 sec. and turn on again.
2. The display shows normal: but no drink is coming.
Possible cause of failure:
Mechanical stop in the ingredients canisters or whipper.

"Blocked"

Measure: Try to find the cause of failure. Clean the mixer system and try again.

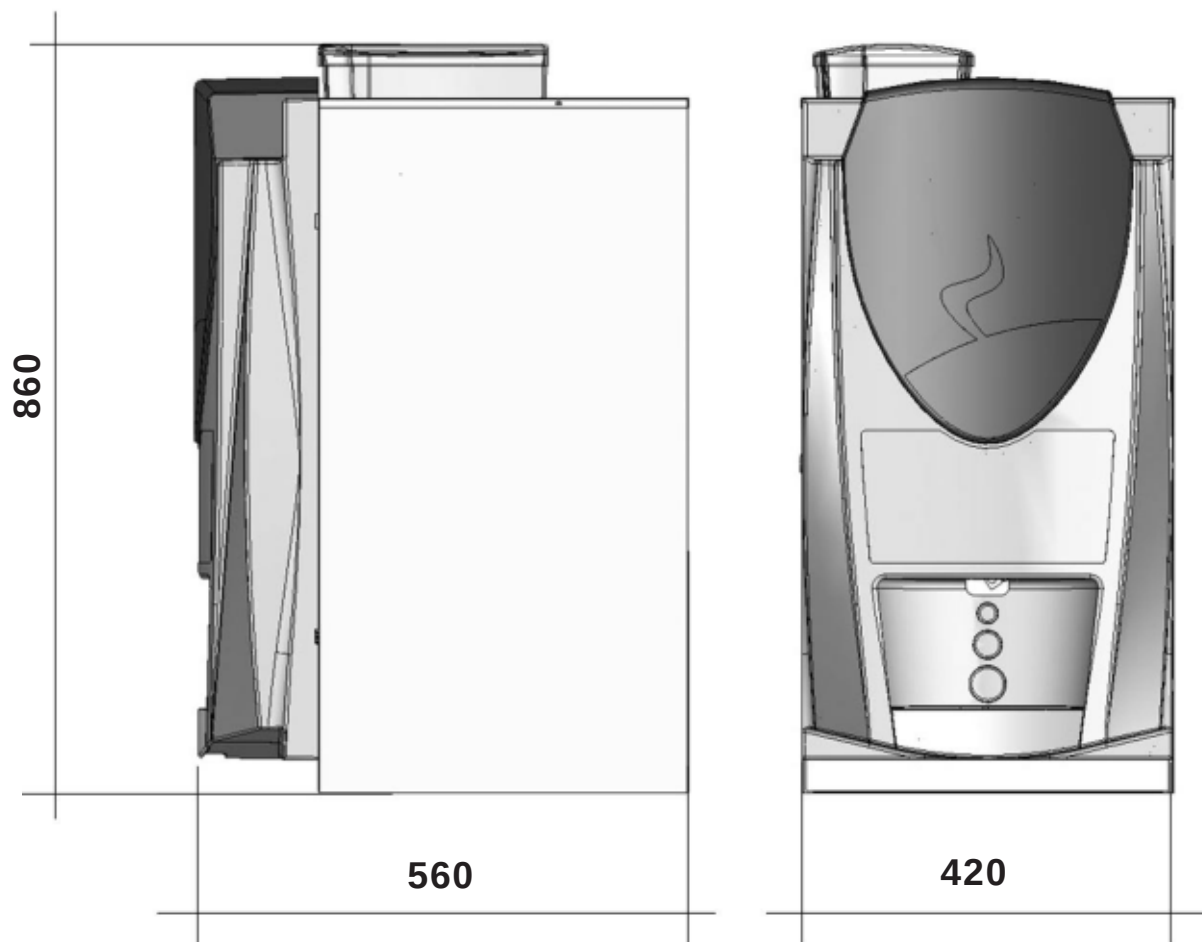
12. Storage / Transport.

Transport and no use in long time.

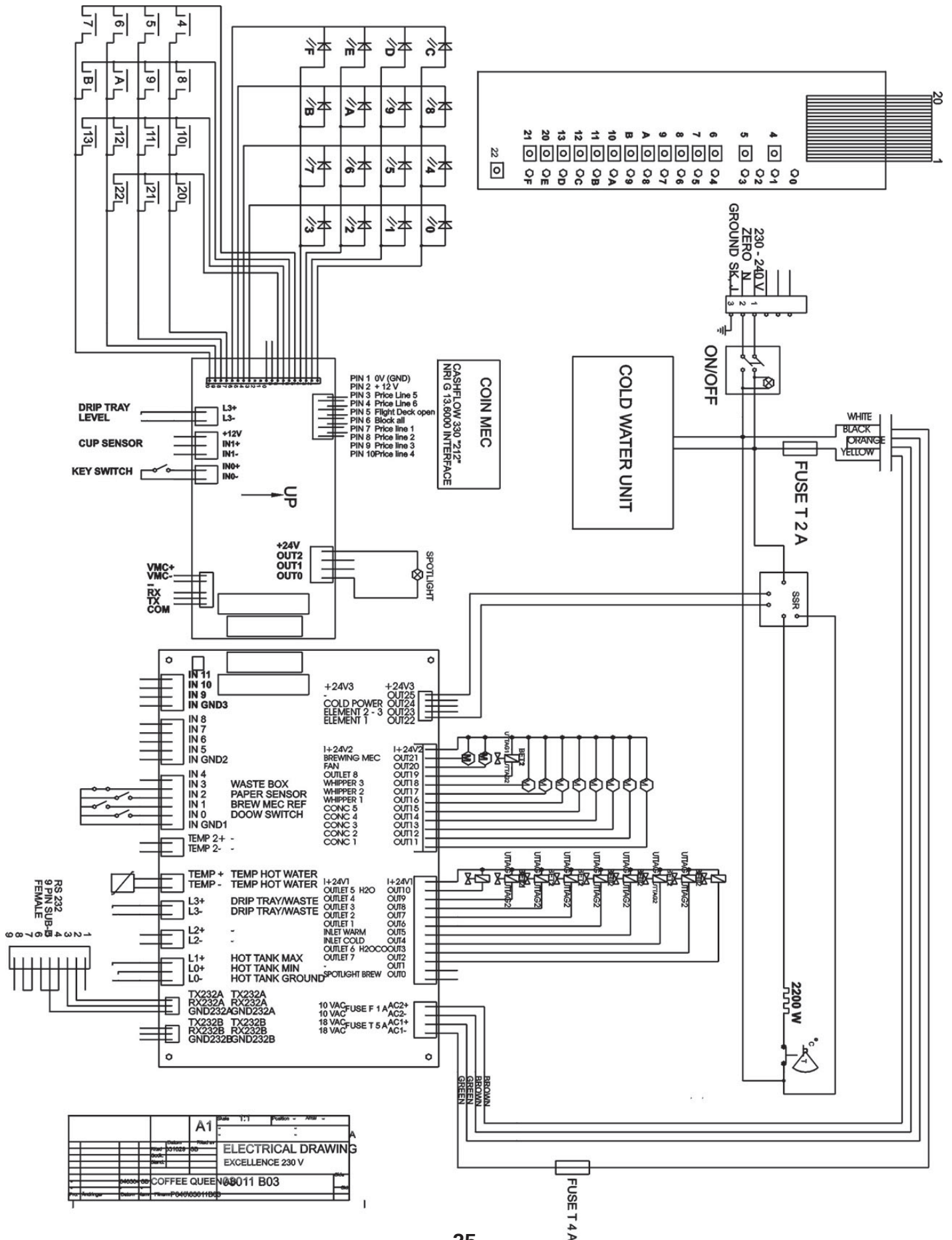
1. Turn off the switch, pull out the plug and close incoming water tube.
2. Empty the water tank.
3. Keep machine free from frost.

Long machine storage at temperatures below 0°C (zero degrees celsius) can cause damage of the machine. Total emptying of water is recommended.





14. Circuit diagram.



15. Spare parts lists.

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Description;	Art. no	Pos. no.	Amount/unit
Level sensor complete	120548	1	1
Gasket, silicone for sensor	150118-02	2	1
Heating element 2200W 230V	1601361	3	1
Water tank complete	7001305	4	1
Gasket, (lid water tank)	1206591	5	1
Motor gear 145 rpm, without axle	1604612	6	4
Motor axle for 1604612, 16mm	1604614	7	4
High limit controll, Bulba 73mm	220220	8	1
NTC thermistor	1604133	9	1
Rubber grommet , inlet for NTC thermistor	1605361	10	1
Ventil, utlopp 24 V DC	120627-03	11	4
Membrane	1501191	11	4
Inlet, for valve	160537-03	12	4
Plugg	160538-03	13	1
Bulk head adaptor, mixing bowl	120498	14	2
Switch 2 pol (illumin.)	160801-04	15	1
Steam trap	120500	16	2
Mixing bowl	1204852	17	2
Whipper	1204842	18	2
Motor whipper 24V F	1604591	19	2
Whipper motor plate	1604592	20	2
Assembly plate	1204781	21	2
Slinger disc	120480	22	2
Grommet for whipper pin	120655-02	23	2
O-ring for assembly plate mod. F	120638	24	1
Outlet brew mech./angled	1201481	25	1
Outlet brew mech./extender	1201482	26	1
Outlet brew mech./adapter	1201483	27	1
O-ring 36,2 x 3,0	120650	28	1
O-ring 15,6 x 1,78	120652	29	1
Foam (filter) for dust trap	1201282	30	1
Dust trap	1105350	31	1
Silikonslang inlopp/ vattentank 8x12 L=530	150501	32	1
Silikonslang vattentank / avtapp 8x12 L=1000	150501	32	1
Silikonslang Te 8x12 L=570	150501	32	1
Silikonslang vattentank 8x12 L=320	150501	32	1
Silikonslang utlopp.vent./choco 8x12 L=280	150501	32	1
Silikonslang utlopp.vent./bryggm 8x12 L=330	150501	32	1
Silikonslang mixer 1/Utlopp 8x12 L=220	150501	32	1

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OBS! Silikonslang (150501) säljes i metervara.

15. Spare parts lists.

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Description;	Art. no.	Pos. no.	Amount/unit
Fan	1604171	40	1
Grid cover for fan	1604172	41	1
Valve inlet 2,5 l/min	1206371	42	1
Solid-state relay	1604201	43	1
Electronic card Ver. II (<i>in use on machine from xxxx</i>)	1604102	44	1
Fuse 4 Ampere (slow 5x20)	1604381	45	1
Decal - fuse 5/1Amp. slow	1701983	46	1
Decal - fuse 4 Amp. slow	1701982	47	1
Brew engine unit compl.	1201432	48	1
Brewer dock white	120144	49	1
Pin 3,5x36	1201453	50	1
Pin 2,0x36	1201454	51	1
Microswitch V5J (brew engine)	160829	52	1
Main supply cable 3x1mm ²	160522	53	1
Main supply cable, Europa	160565	53	1
Inlet-plug and socket	160570	53	1
Fuse holder	1604351	54	2
Fuse 2 Amp. slow 5x20	1604382	55	1
Decal - fuse 2 Amp. slow	1701981	56	1
Connection block PA 80	160351	57	1
Gable (connection block) PA 80	160352	58	1
Transformer	5003111	59	1
Micro switch	160841	60	1
Waste box, top cabinet	1105355	61	1
Brew mechanism, complete	7001137	64	1
Tool, dismantling of filter	4720090	65	1
Grinder 230 VAC	1604752	69	1
Bean container	1105509	70	1
Lid, bean container	1105510	71	1
Operating capacitor 12 µF	832392	72	1
Relay	160239	73	1
Socket, relay	160246	74	1

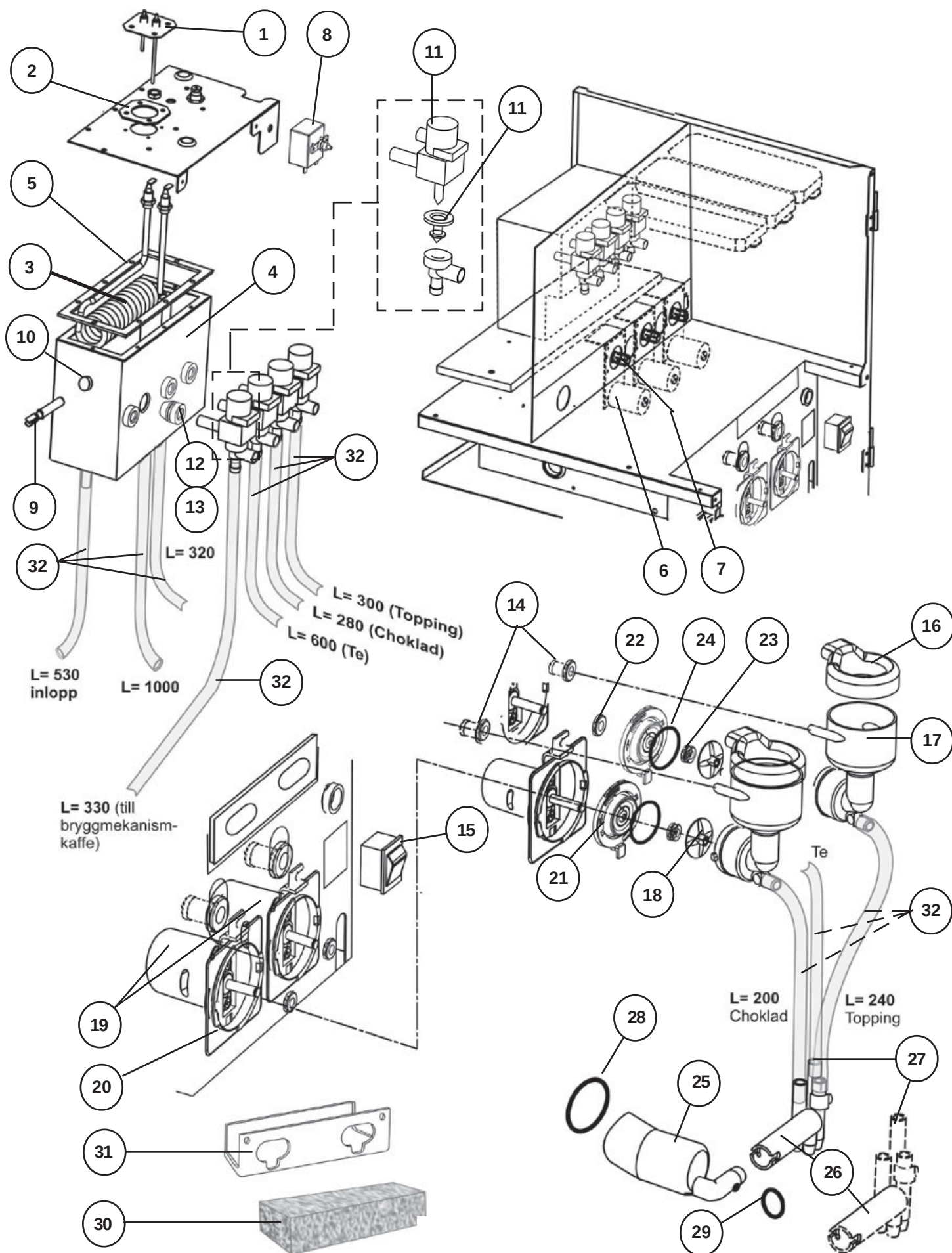
15. Spare parts lists.

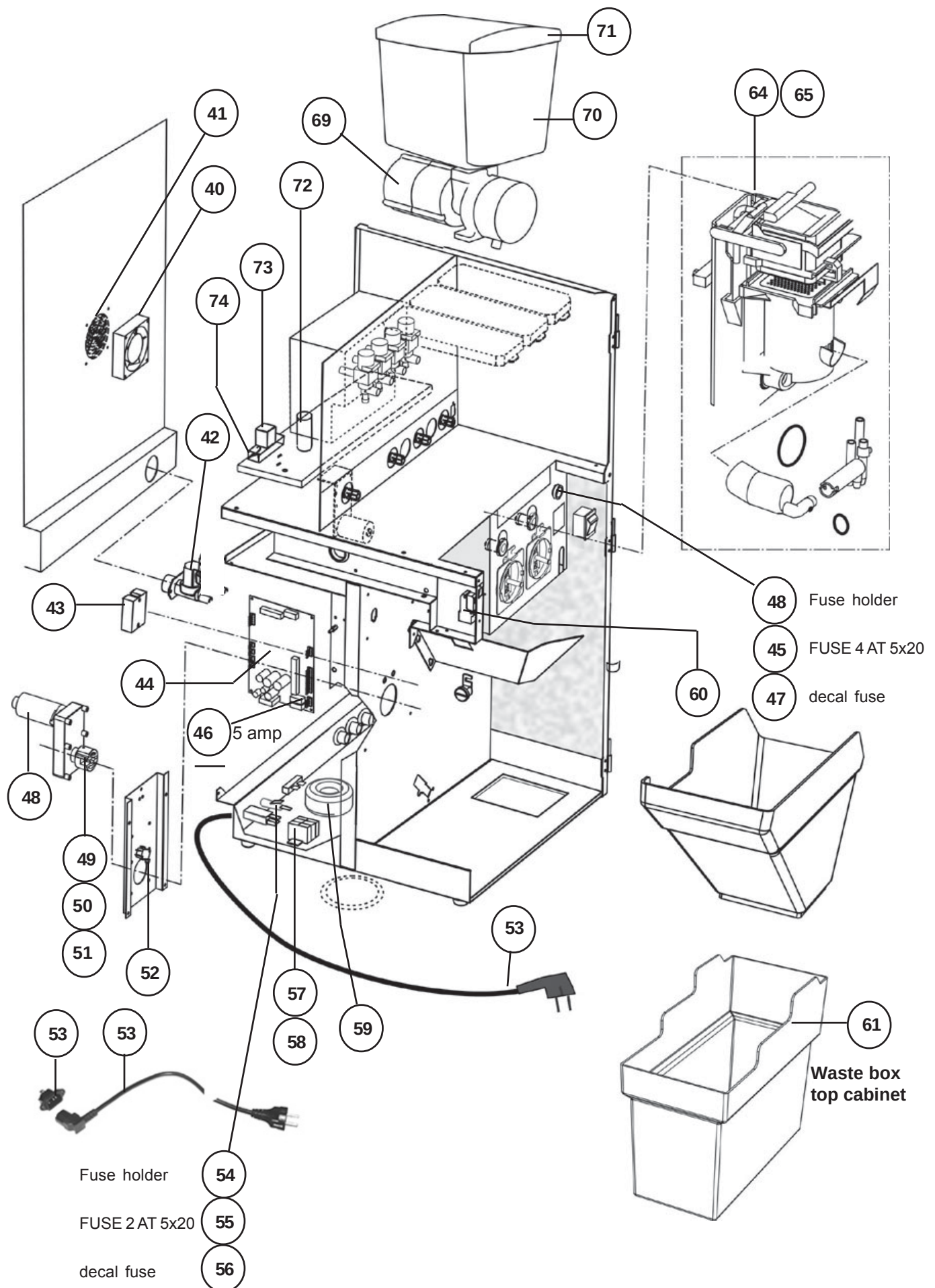
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Description;	Art. no	Pos. no.	Amount/unit		
Ingredients canister B67 x H250 plastic	1205617	80		3	
Lid 67	1205671	81		3	
Diode lamp complete	1104544	82		1	
Drip tray	1304091	83		1	
Drip tray insert	1304093	84		1	
Flat conductor cable	1606727	85		1	
Display-board Semec 1	1604101	86		1	
Key-switch	1202551	87		1	
Membrane switch (drink 1 - 8)	1603851	88		1	
Lock with clamp(door) Instant	120250	89		2	
Key, (door) Instant	120251	90		2	
Service key (tool)	180290-03	91		1	
Foot	1203202	92		4	
Inlet hose 3/4"x1/2" (water main)	150541	93		1	

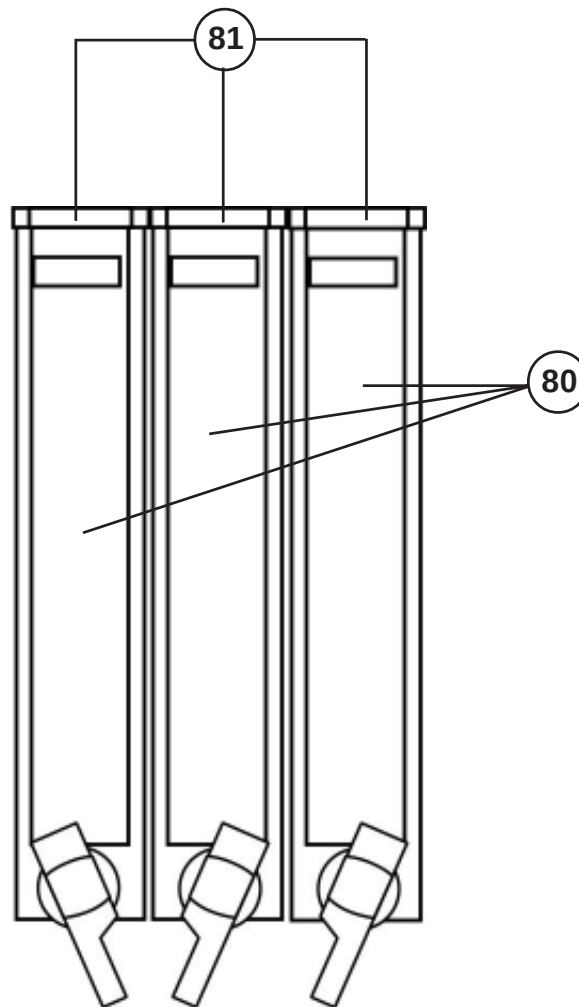
Description:	Article no.	Pos.No.	Amount/unit
Motor C0212.06	837932	150	1
Inlet housing	838916	151	1
Slotted pan head screw DIN 923 - M4x12	838753	152	1
Adjustment shaft	837992	153	1
Adjustment pinion	837991	154	1
Pressure spring	838709	155	1
Allen set screw DIN 915 - M5x10	839230	156	1
Slotted cylinder head screw DIN 84 - M4x50	838704	157	3
O-ring	839252	158	1
Worm shaft	837863	159	1
Allen screw DIN 912 - M4x4 - stainless steel	838869	160	1
Grinding disc carrier - fixed	837985	161	1
Fixed grinding disc	837247	162	1
Grinding disc carrier - rotating	838141	163	1
Rotating grinding disc	837248	164	1
Pan head screw DIN 85 M5x8	835579	165	4
Washer DIN 433 - 10,5 stainless steel	839261	166	1
Hexagon nut left-hand thread	838642	167	1
Grinding housing	839259	168	1
Allen screw DIN 912 - M4x45	838876	169	3
Outlet tube, metal	839260	170	1
Allen set screw DIN 916 - M4x10	836503	171	1
Outlet, silicone hose (30mm) 16x20	1505081	172	1

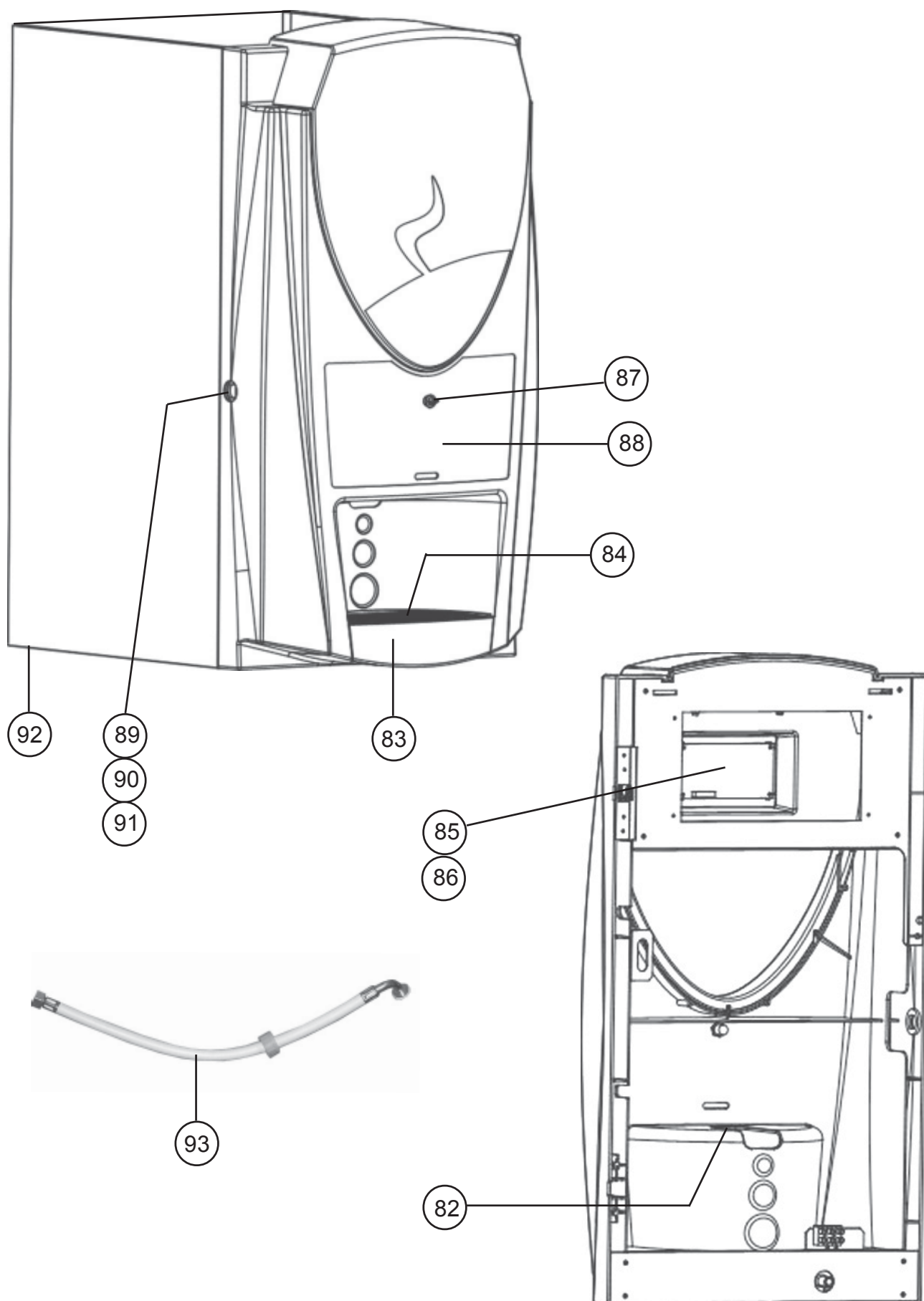
Description:	Article no.	Pos.no.	Amount / unit
Deflector, Cylinder	4720008	200	
Pin, Crank Arm	4720010	201	
O-ring Piston	4720012	202	
Rubber Ring, Piston	4720013	203	
Teflon Seal	4720014	204	
Plate, Top	4720015	205	
Screw, 8 x 1/2, Truss, AB, TAPP	4720016	206	
Cylinder	4720017	207	
Plug, Vent, Cylinder	4720018	208	
Screw, 4-40 x 1/4, Truss	4720019	209	
Screw, 8-32 x 1/2, Truss	4720020	210	
Assembly, Filter Screen, Poly, #44	47200213	211	
Seal, Brew Chamber	4720022	212	
Bar, Latch	4720023	213	
Carriage, Wiper	4720024	214	
Rod, Carriage, Wiper	4720025	215	
Retaining Ring, .250	4720026	216	
Wiper, Complete	4720027	217	
Brew Chamber	4720028	218	
Spring Clip, Latch Bar	4720029	219	
Housing, Vertical Rod	4720001	220	
Cam, Triple	4720002	221	
Unwipe Arm Assembly	4720003	222	
Spacer, Wipe Arm	4720004	223	
Spring, Wipe Arm	4720005	224	
Retaining Ring, TRU ARC	4720006	225	
Vearm	4720007	226	
Plate, Ret., Cycle	4720030	227	
Plate, Ret., Support	4720031	228	
Latch, Block, LHS	4720032	229	
Latch, Block, RHS	4720033	230	
Retaining Ring	4720034	231	
Tube, Outlet, Water	4720035	232	
Wrap, Brew Chamber	4720036	233	
Shim 0,2	1303501	234	
Shim 0,5	1303502	235	
Spacer, Sil., 3/16 x .350 x 1.5	4720038	236	
Spring, H-Frame	4720039	237	
H-Frame	4720040	238	
Screw, 8-32 x 3/4, PAN	4720041	239	
Pin, Grooved, 3/16 x 1.25	4720046	240	
Wipe Arm, Assembly	4720048	241	
Vertical Rod, Welded	4720049	242	

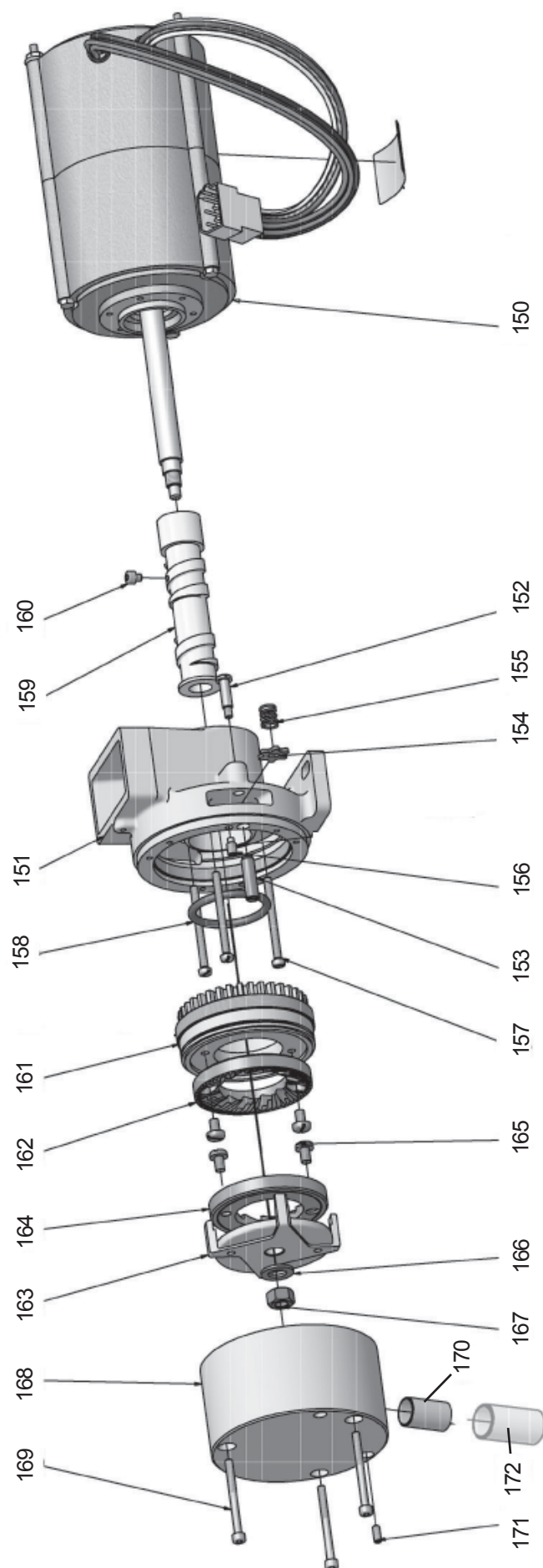


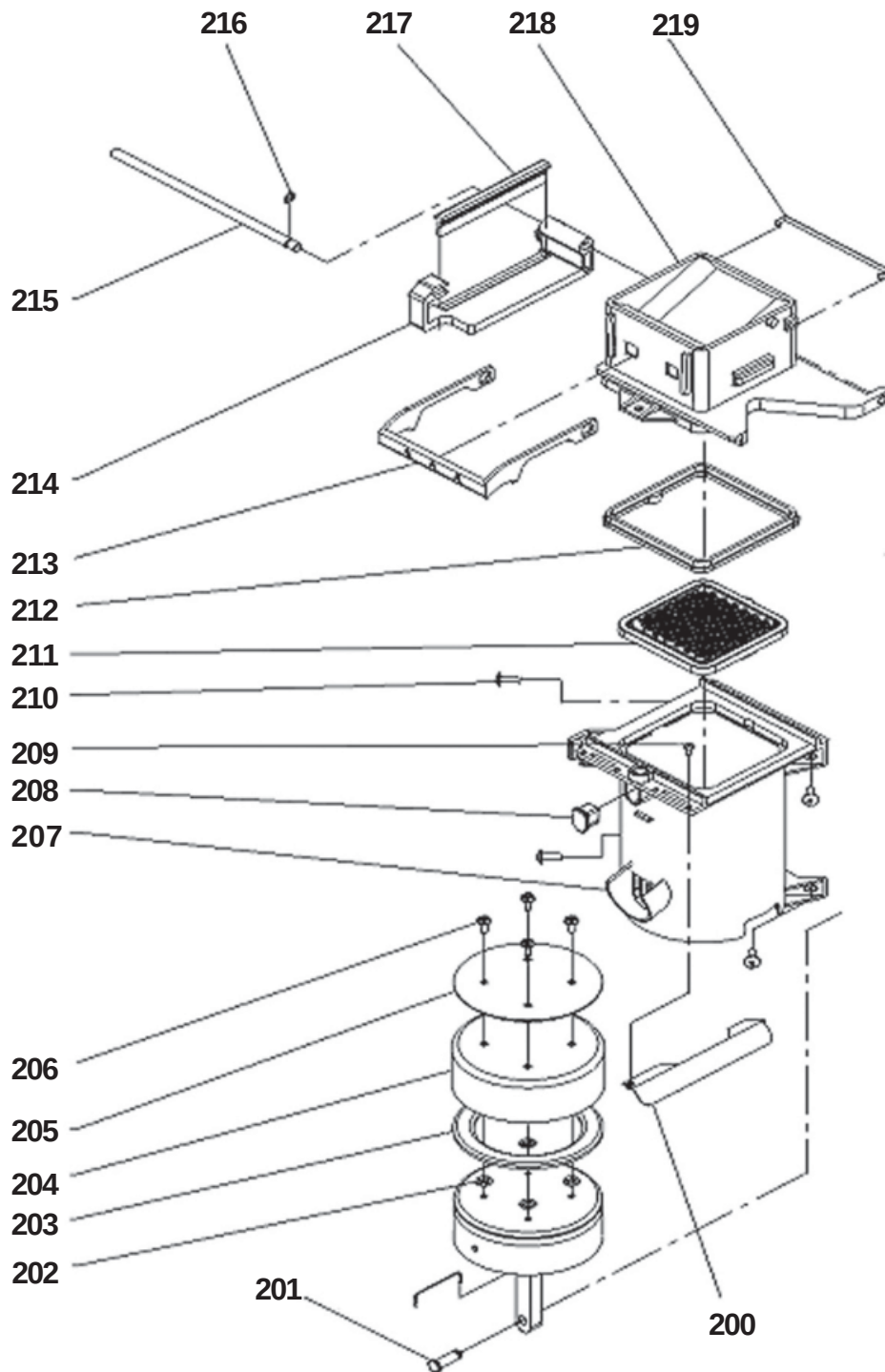


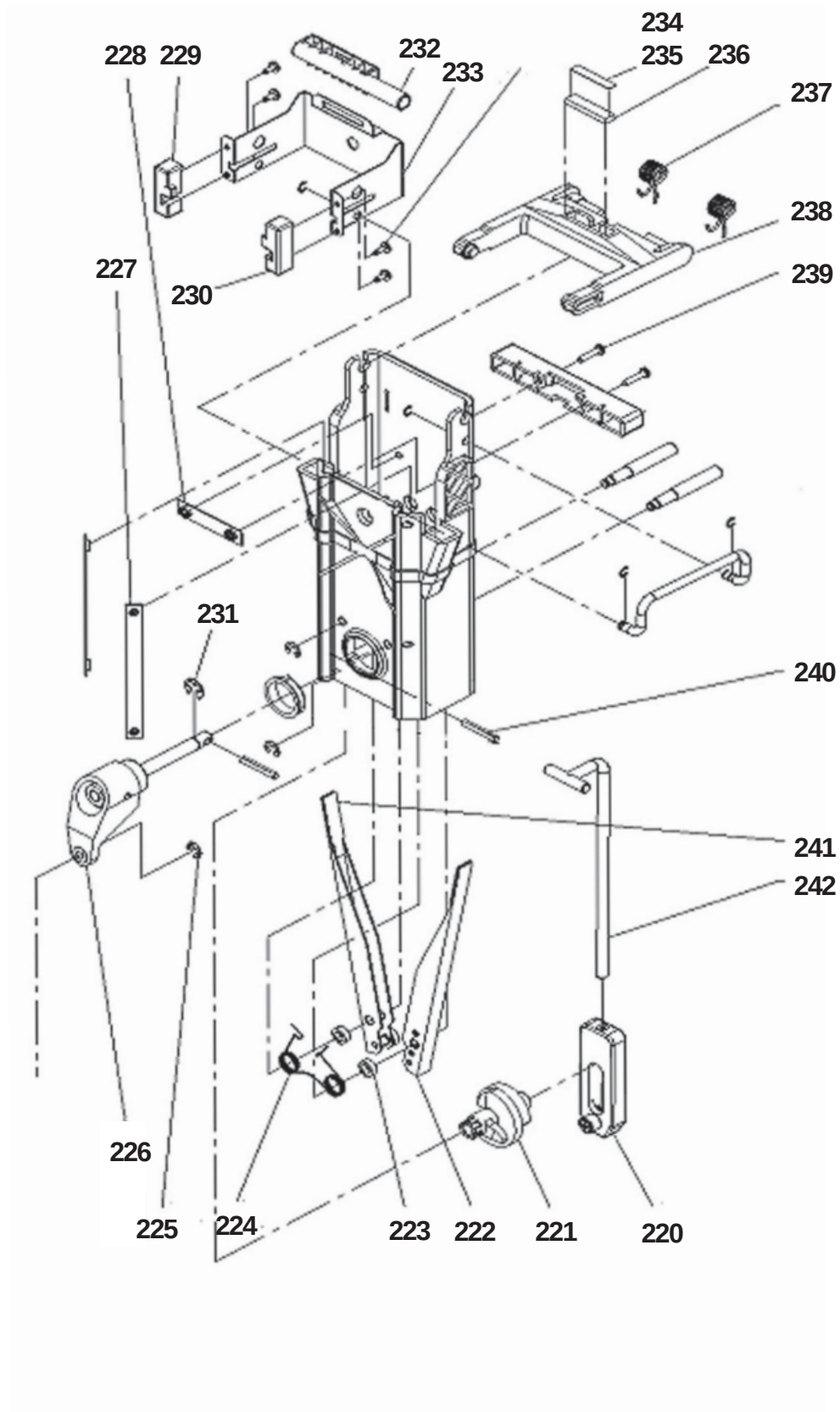
Parts; canister 67 x 250











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COFFEE QUEEN AB Box 960, 67129 ARVIKA besöksadress; korpralsv. 1B,
Tel vxl; +46 (0)570-477 00, Fax; +46 (0)570 477 19
E-mail: info@coffeequeen.se www.coffeequeen.se

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